

IMPROVED SCLERAL PROSTHESIS FOR TREATMENT OF
PRESBYOPIA AND OTHER EYE DISORDERS

ABSTRACT OF THE DISCLOSURE

Presbyopia and other eye disorders are treated by implanting
within a plurality of elongated pockets formed in the tissue of the
sclera of the eye transverse to a meridian of the eye, a prosthesis
having an elongated base member having an inward surface adapted to
be placed against the inward wall of the pocket and having a ridge
on the inward surface of the base extending along at least a major
portion of the major dimension of the base. The combined effect of
the implanted prostheses is to exert a radially outward traction on
the sclera in the region overlying the ciliary body which expands
the sclera in the affected region together with the underlying
ciliary body. The expansion of the ciliary body restores the
effective working distance of the ciliary muscle in the presbyopic
eye and thereby increases the amplitude of accommodation.
Introduced is an improved scleral prosthesis for the treatment of
presbyopia and other eye disorders. An exemplary prosthesis is
adapted for contact with the sclera of an eyeball, and comprises a
body having a first end and a second end wherein the body has (i) a
planform adapted to expand the contacted sclera to increase the
effective working distance of the ciliary muscle of the eyeball,

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and (ii) means for stabilizing the prosthesis within the surgically
formed pocket within the sclera of the eyeball.

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